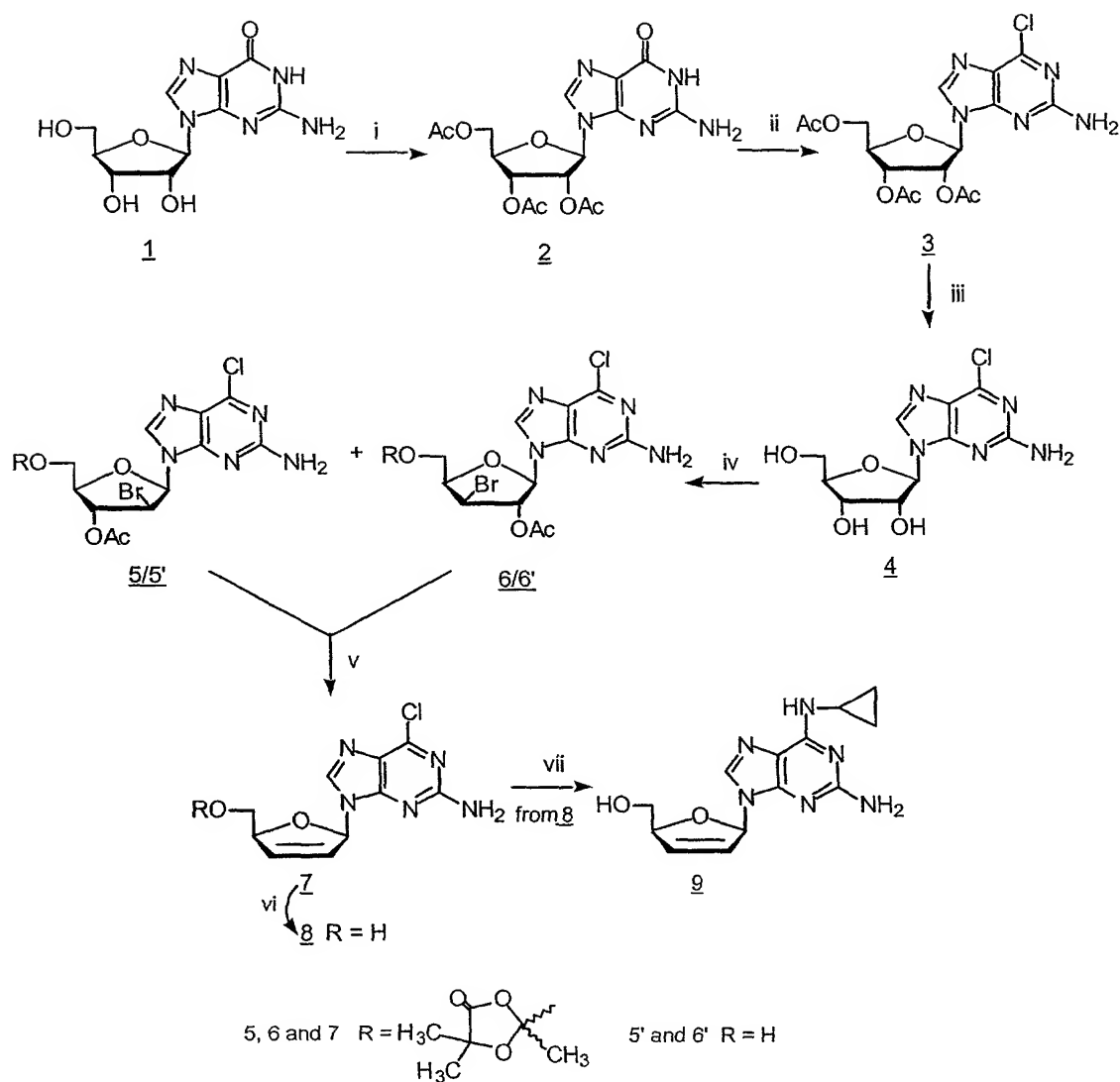


FIGURE 1

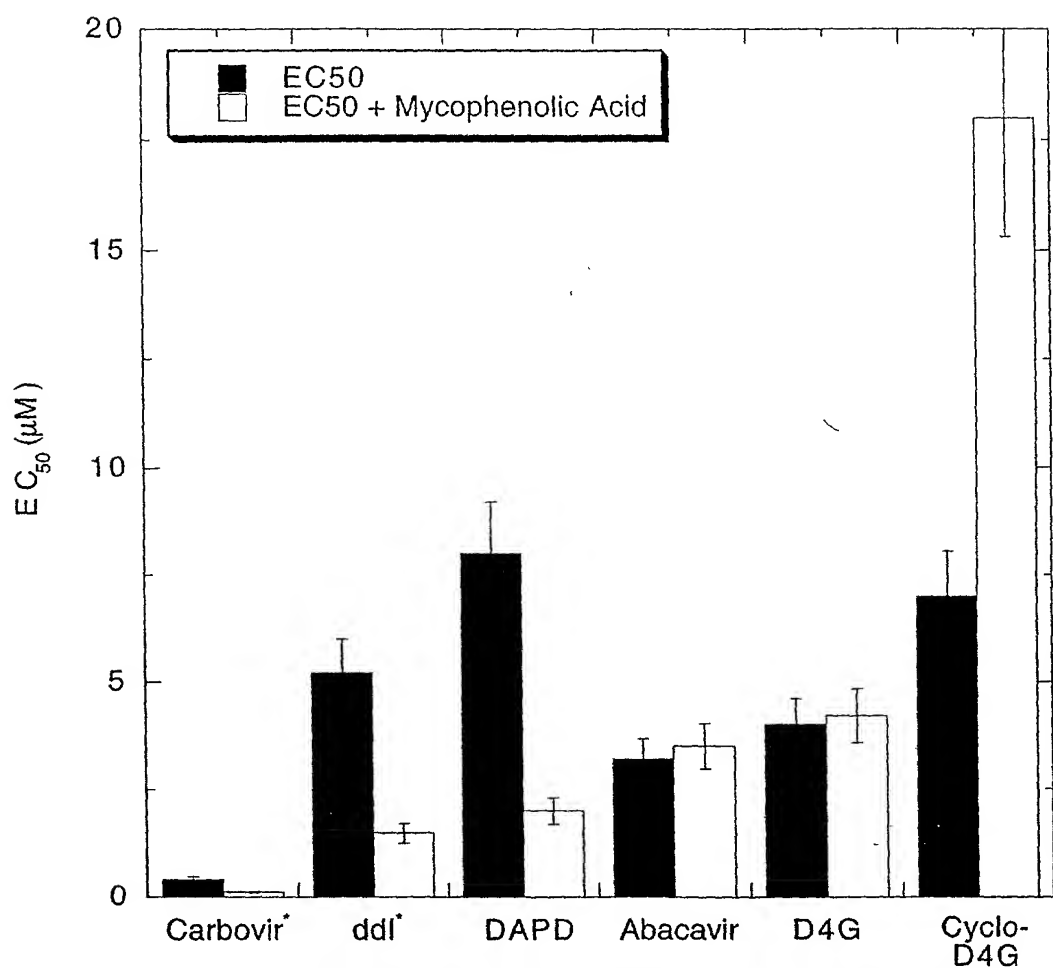
## Synthesis of D4G Prodrug



i.  $\text{Ac}_2\text{O}/\text{Pyridine}/\text{DMF}$   $75^\circ$  4h; ii.  $\text{POCl}_3/\text{C}_6\text{H}_5\text{NEt}_2/(\text{n-Bu})_4\text{N}^+\text{Cl}^-/\text{CH}_3\text{CN}$ ,  $100^\circ$ , 10min; iii.  $\text{NH}_3/\text{CH}_3\text{OH}$ , r.t., 6h; iv.  $(\text{CH}_3)_2\text{C}(\text{OAc})\text{COBr}/\text{CH}_3\text{CN}$ , r.t., 3 h; v.  $\text{Zn}/\text{DMF}$ , r.t., 40min; vi.  $\text{K}_2\text{CO}_3/\text{CH}_3\text{OH}/\text{H}_2\text{O}$ , r.t., 2h; vii. Cyclopropylamine/  $\text{C}_2\text{H}_5\text{OH}$ , r.t..

FIGURE 2

## Effects of Mycophenolic Acid on Anti-HIV Activity of Nucleosides



\*Compounds are more active than what is normally observed because experiments were done using slowly dividing cells. Normally observed  $EC_{50}$  values in the absence of mycophenolic acid for Carbovir and ddl are 1.2  $\mu M$  and 20  $\mu M$  respectively.

FIGURE 3

Comparison of Synergy Between Abacavir/3TC and cyclo D4G/3TC

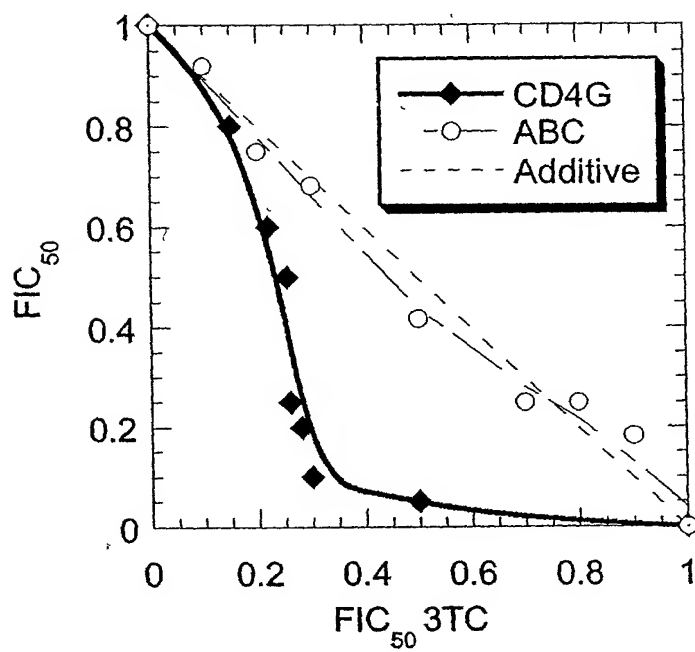


FIGURE 4

Effects of FDA Approved Nucleosides on the anti-HIV Activity of Cyclo D4G

